SGI, SGW

Wire Actuated Incremental / Absolute Encoder

ENGLISH

1. Safety information

• In order to carry out installation correctly, we strongly recommend this document is read very carefully. This will ensure your own safety and the operating reliability of the device.

• Your device has been quality controlled, tested and is ready for use. Please respect all warnings and information which are marked either directly on the device or in this document.

• Warranty can only be claimed for components supplied by SIKO GmbH. If SGI or SGW are used together with other products, the warranty for the complete system is invalid.

• Repairs should be carried out only at our works. If any information is missing or unclear, please contact the SIKO sales staff.

2. Identification

Please check particular type of unit and type number from the identification plate. Type number and the corresponding execution are indicated in the delivery documentation.

3. Installation

The unit should be used only according to the protection level provided. Protect SGI/SGW, if necessary, against environmental influences such as sprayed water, dust, knocks, extreme temperatures.

The wire actuated transmitter is a high quality measuring device and should be mounted to a flat surface (fig. 1).

• Remove the transport safety wire (1).
• Use the two through holes for fixing the unit to the mounting surface (2).

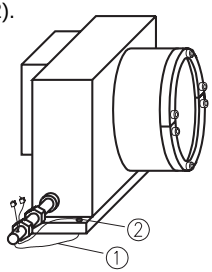

Fig.1 : Mounting

• After mounting, check that the maximum extension length complies with the application (fig. 2).

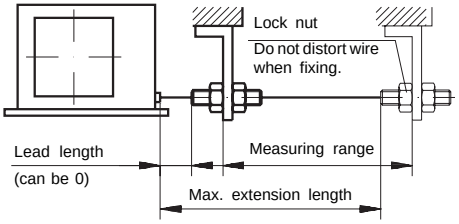

Fig.2 : Extension length check

Extend the wire up to the fixing point, ensuring it is aligned and is not twisted. Tighten the lock nut to fix the wire connector.

Attention: The overall length of the measuring range + lead length must not exceed the maximum extension length.

Wire handling

To avoid damage to the wire outlet and to ensure the unit's maximum life, the wire must be extended co-axially to the wire outlet (fig. 2).

Avoid sudden release of the wire when it is extended as this will lead to incorrect rewind and entanglements with subsequent wire breakage. The wire should aways be under tension when it is extended.

For correction function the wire must remain without kinks or flattening.

Extension wire (accessory)

If necessary an extension wire can be used.

Attention: By using an extension wire the maximum measuring length can not be altered. Make sure that the maximum extension length is not exceeded.

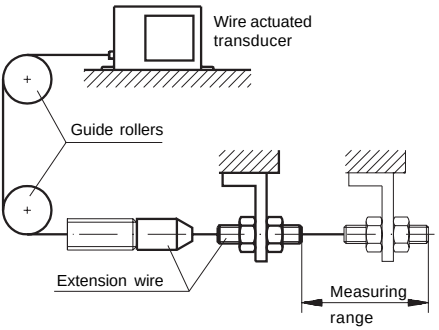

Fig.3 : Extension wire, Guide roller

For mounting the wire extension : Push the connecting piece (3) onto the screw connector (1). The press-fit clamping sleeve (2) will neatly join both elements.

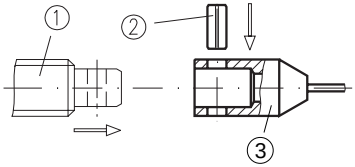

Fig.4 : Mounting of the wire extension

Guide rollers (accessory)

Are used for applications where wire actuated transducer and wire cannot be mounted in one line. Using guide rollers the wire can be pulled out in any direction (fig. 3).

- Guide rollers must be mounted in line with the wire.
- Maintain cleanliness of guide rollers at all times.

Attention: When using an extension wire make sure that the wire connector does not go over the guide roller.

4. Encoder mounting

The wire actuated unit is ready to be fitted to an incremental or absolute encoder (fig. 5).

- The encoder's break-away torque and operational torque must not exceed the admissable value of 3 Ncm.
- Check whether encoder's (4) and compensation coupling's diameter comply (6).
- Loosen screws (2) and servo flanges (3); remove plastic plug of the opening (7) in the flange.
- Assemble encoder and wire actuated unit together so that encoder's shaft fits into compensation coupling (6) (grub screw (5) must be unscrewed).
- Mount the servo flanges (3) to fix the encoder.
- Slowly pull out the wire connector (1) to turn the compensation coupling until the grub screw (5) is accessible through the flange's opening (7).

Attention ! Tighten the grub screw (5) whilst keeping the wire tense.

- Tighten screws uniformly (2) to fix the servo flanges to the encoder. Mount without force!
- Finally close the bore (7) with the plastic plug to avoid ingress of dirt.

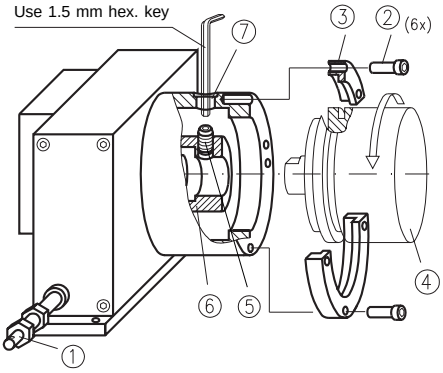

Fig.5 : Encoder mounting

5. Adjustment

For adjusting the reference point loosen the screws (2) until the encoder can be turned.

Rotate the encoder in arrow direction until the reference point is reached; then re-tighten the screws.

Attention: For reference point adjusting the encoder must only be rotated in counter-clockwise direction.

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